



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,819	08/25/2008	Thomas Schweiker	026032-5034	5053

22428 7590 10/29/2010
FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW
WASHINGTON, DC 20007

EXAMINER

MCPARTLIN, SARAH BURNHAM

ART UNIT	PAPER NUMBER
----------	--------------

3636

MAIL DATE	DELIVERY MODE
-----------	---------------

10/29/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,819	Applicant(s) SCHWEIKER, THOMAS	
	Examiner SARAH B. MCPARTLIN	Art Unit 3636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 20-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 20-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 August 2010 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The amendment filed 24 August 2010 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The original disclosure does not describe a support that is at least partially multi-layered with the wiring preferably being fixed to one of the layers thereby making manufacturing of the support in a plurality of steps possible in which the layer to which the wiring is fixed is pre-manufactured before it is joined together with further layers, the.

Applicant is required to cancel the new matter in the reply to this Office Action.

Drawings

2. The drawings are objected to because Figure 5 constitutes new matter. The original disclosure does not describe such a structure as depicted in Figure 5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes

Art Unit: 3636

made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 7-9, 11, 13-16, 18 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Jinno et al. (6,356,187) in view of Breed et al. (7,387,183). With respect to claim 1, Jinno discloses a seat (1B) (Figure 9), in particular for a vehicle, having a supporting structure (2), a support (1a) and wiring (7a)(7b)(E1)(E2), apart from a seating heating system, wherein the wiring (7a)(7b)(E1)(E2) is fixed to the support (1a) and wherein the wiring comprises flat conducts (E1)(E2) connected to a plurality of devices including a control circuit (17) and a detection circuit (14).

With respect to claim 20, the support (1a) is at least partially multi-layered, including layers (4)(6)(9), with the wiring preferably being fixed to one of the layers (6).

With respect to claim 21, the layers (4)(6)(9) are formed from different materials (i.e. cushion material, covering material, fabric).

With respect to claim 22, the seat (1B) includes a plurality of supports (1a) and (1b), and the wiring is fixed to at least one of the supports (1a).

With respect to claim 25, the wiring is fitted in the support (1a) given that it is positioned between individual layers of the support.

With respect to claim 26, the support (1a) has a visible side (comprised of cover (9)) and a rear side (comprised of the rest of the support), and in that the wiring is provided on the rear side of the support.

With respect to claim 28, the fixing of the wiring takes place by adhesive bonding (column 2, line 62).

With respect to claim 30, the plurality of devices is circuit components (14)(17).

With respect to claim 31, the wiring, including conductors (E1)(E2), is connected to a supporting structure component (6) and can be manufactured in advance by “weaving stringy metal in fabric, by applying electrically conductive paint on fabric, by metal plates, by metal foils such as copper foils, aluminum foils etc., buy flexible printed circuit boards, etc. “(column 9, lines 56-60).

With respect to claim 32, the wiring is connected to a supporting structure component (6) by way of interlacing connections in the form of “hook-and-loop (VELCRO) fasteners” (column 9, line 66) which constitute short branch connections.

With respect to claim 33, the wiring is essentially as flexible or more flexible as the support (1a).

Art Unit: 3636

With respect to claims 35-36, a vehicle seat (1B) includes a flat conductor wiring (E1)(E2) therein, the flat conductor wiring being apart from any seat heating system, the vehicle seat comprising a seat having a support (1A), the flat conductor wiring being fixed in the support.

Jinno discloses all claimed elements without specifically stating that circuitry components (14) and (17) are energy consuming device.

Breed et al. teaches that power is required to run circuitry and transducers in column 28, lines 20-21. It is therefore obvious to one of ordinary skill in the art at the time the instant invention was made to assume that circuitry components (14) and (17) are indeed “energy consuming” components.

With respect to claim 34, Jinno et al. reveals all claimed elements with the exception of the method steps of “fixing”, “fitting” and “joining.” The structure disclosed by Jinno et al. makes the method steps obvious to one of ordinary skill in the art since the wiring is fixed to a layer (6) of the support (1a) by bonding (column 9, line 62), the layers (4)(6)(9) are clearly fit onto the seat since they are positioned thereon, and the wrapped configuration of the covering (9) joins the layers of the support together. Because the layers are joined together, this process inherently has to take place either before the layers are fit to the support or after the layers are fit to the support.

5. Claims 22-24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jinno et al. (6,356,187) in view of Breed et al. (7,387,183) in view of Suematsu

Art Unit: 3636

(5,329,096). As disclosed above, Jinno reveals all claimed elements except wiring mounted on a felt mat.

Suematsu discloses a felt mat (11) upon which wiring (6) is mounted.

It would have been obvious to one of ordinary skill in the art at the time the instant invention as made to use felt (11) as taught by Suematsu for the base material (6) disclosed by Jinno et al. All of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jinno et al. (6,356,187) in view of Breed et al. (7,387,183) in view of Kustanovich (4,644,801). As disclosed above, Jinno et al. reveals all claimed elements with the exception of a plurality of layers of wiring arranged on above another.

Kustanovich discloses a pressure transducer with a plurality of layers of wiring positioned on above the other.

It would have been obvious to one of ordinary skill in the art at the time the instant invention was made to use a plurality of layers of wiring as taught by Kustanovich since such a configuration can tell more about the occupancy of the seat to the controller, thereby improving the safety provided by the passenger detection system of Jinno. Furthermore, all of the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with

Art Unit: 3636

no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Response to Amendment/Arguments

7. Applicant's amendment filed on 24 August 2010 has been fully considered.

Applicant's amendment has overcome the claim objections set forth by the Examiner in the 24 March 2010 rejection.

Applicant argues that a drawing showing the multi-layered structure and flat conductor are not required. The respectfully disagrees. Applicant positively claims multiple layers and positively claims conductors. As such these need to be disclosed in the drawings. New drawing 5 however constitutes new matter. The original disclosure describes a multi-layered support with the wiring preferably fixed to one of the layers. The original disclosure however does not necessarily state that the wiring in sandwiched between two layers.

Applicant first argues that Jinno does not teach flat conductors connected to a plurality of energy consuming device. The Examiner contends that conductors (E1) and (E2) are connected to circuitry (14) and (17) for determining occupancy of the seat. Signals are passed from the conductors through the circuitry and processed by the MPU to determine occupancy. Jinno does not expressly disclose that such circuitry items (14) and (17) and the MPU are energy consuming devices. Breed et al, however, teaches that power is required to run circuitry and transducers and electronics in a

Art Unit: 3636

seating system. The Examiner therefore contends that it would be obvious to assume that circuits (14)(17) and the MPU constitute energy consuming devices.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SARAH B. MCPARTLIN whose telephone number is (571)272-6854. The examiner can normally be reached on M-Th 7:30 am - 5:00 pm.

Art Unit: 3636

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Dunn can be reached on 571-272-6670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sarah B. McPartlin/
Primary Examiner, Art Unit 3636

27 October 2010